Having thus described the preferred embodiments, the invention is now claimed to be

1 A method for scheduling print operations in a print system, comprising the steps of:

a) partitioning an intermediate substrate into multiple pitch areas,

b) scheduling the marking of multiple page images by a marking material applicator on the multiple pitch areas, the marking of each page image being accumulated and completed during multiple passes of an assigned pitch area past the applicator,

c) beginning the marking of a first page image in a first pitch area of the multiple pitch areas during a first revolution of the intermediate substrate, and

d) beginning the marking of subsequent page images on available pitch areas of the multiple pitch areas during subsequent revolutions of the intermediate substrate, such marking being delayed from the marking of the prior page image so that the marking of two or more page images are not completed during the same revolution of said intermediate substrate.

2. The method for scheduling print operations as set forth in claim 1, wherein step a) partitions the intermediate substrate into two pitch areas identified as the first pitch area and a second pitch area.

3 The method for scheduling print operations as set forth in claim 2, wherein the marking of each page image is accumulated and completed during four passes.

4 The method for scheduling print operations as set forth in claim 3, step d) further comprising the steps of:

e) continuing to mark the first page image in the first pitch area during a second revolution of the intermediate substrate,

f) if there are no additional page images to be marked, continuing to mark the first page image in the first pitch area during a third revolution and a fourth revolution

of the intermediate substrate, otherwise continuing to mark the first page image in the first pitch area and beginning the marking of a second page image in the second pitch area during a third revolution of the intermediate substrate,

g) continuing to mark the first page image in the first pitch area and the second page image in the second pitch area during a fourth revolution of the intermediate substrate; and,

h) continuing to mark the second page image in the second pitch area during a fifth revolution and a sixth revolution of the intermediate substrate

5 The method for scheduling print operations as set forth in claim 4, wherein at least one additional page image is to be marked on the intermediate substrate, wherein:

the marking of the next page image begins in the first pitch area of the intermediate substrate during the fifth revolution of the intermediate substrate with marking continuing during three subsequent passes of the first pitch area past the marking material applicator in the same manner as the marking of the first page image, and,

if additional page images are to be marked on the intermediate substrate, the marking of each additional page image begins two revolutions after the revolution in which the previous page image marking began, wherein the marking of consecutive page images continues to alternate between the first pitch area and the second pitch area in the same manner as described for the first and second page images

6 The method for scheduling print operations as set forth in claim 3, step d) further comprising the steps of

e) if there are no additional page images to be marked, continuing to mark the first page image in the first pitch area during a second, a third, and a fourth revolution of the intermediate substrate, otherwise continuing to mark the first page image in the first pitch area and beginning the marking of a second page image in the second pitch area during a third revolution of the intermediate substrate,

f) continuing to mark the first page image in the first pitch area and the second page image in the second pitch area during the third and fourth revolutions of the intermediate substrate, and,

g) continuing to mark the second page image in the second pitch area during the fifth revolution of the intermediate substrate.

7. The method for scheduling print operations as set forth in claim 6, wherein at least one additional page image is to be marked on the intermediate substrate, wherein:

the marking of the next page image begins in the first pitch area of the intermediate substrate during the fifth revolution of the intermediate substrate with marking continuing during three subsequent passes of the first pitch area past the marking material applicator in the same manner as the marking of the first page image; and,

if additional page images are to be marked on the intermediate substrate, the beginning of marking of additional page images continues to alternate between one revolution after the revolution in which the previous page image marking began and three revolutions after the revolution in which the previous page image marking began in the same manner as described for the first, second, and third page images, wherein the marking of consecutive page images also continues to alternate between the first pitch area and the second pitch area in the same manner as described for the first and second page images.

8 The method for scheduling print operations as set forth in claim 2, wherein the marking of each page image is accumulated and completed during six passes

9. The method for scheduling print operations as set forth in claim 8, step d) further comprising the steps of:

e) continuing to mark the first page image in the first pitch area during a second revolution and a third revolution of the intermediate substrate,

f) if there are no additional page images to be marked, continuing to mark the first page image in the first pitch area during a fourth revolution, a fifth revolution, and a sixth revolution of the intermediate substrate, otherwise continuing to mark the first page image in the first pitch area and beginning the marking of a second page image in the second pitch area during a fourth revolution of the intermediate substrate,

g) continuing to mark the first page image in the first pitch area and the second page image in the second pitch area during a fifth revolution and a sixth revolution of the intermediate substrate; and,

h) continuing to mark the second page image in the second pitch area during a seventh revolution, an eighth revolution, and a ninth revolution of the intermediate substrate

10. The method for scheduling print operations as set forth in claim 9, wherein at least one additional page image is to be marked on the intermediate substrate, wherein:

the marking of the next page image begins in the first pitch area of the intermediate substrate during the seventh revolution of the intermediate substrate with marking continuing during five subsequent passes of the first pitch area past the marking material applicator in the same manner as the marking of the first page image, and,

if additional page images are to be marked on the intermediate substrate, the marking of each additional page image begins three revolutions after the revolution in which the previous page image marking began, wherein the marking of consecutive page images continues to alternate between the first pitch area and the second pitch area in the same manner as described for the first and second page images

11. The method for scheduling print operations as set forth in claim 8, step d) further comprising the steps of:

e) continuing to mark the first page image in the first pitch area during a second revolution of the intermediate substrate;

f) if there are no additional page images to be marked, continuing to mark the first page image in the first pitch area during a third, a fourth, a fifth, and a sixth revolution of the intermediate substrate, otherwise continuing to mark the first page image in the first pitch area and beginning the marking of a second page image in the second pitch area during a third revolution of the intermediate substrate,

g) continuing to mark the first page image in the first pitch area and the second page image in the second pitch area during a fourth, a fifth, and a sixth, revolution of the intermediate substrate; and,

h) continuing to mark the second page image in the second pitch area during a seventh revolution and an eighth revolution of the intermediate substrate

12 The method for scheduling print operations as set forth in claim 11, wherein at least one additional page image is to be marked on the intermediate substrate, wherein

the marking of the next page image begins in the first pitch area of the intermediate substrate during the seventh revolution of the intermediate substrate with marking continuing during five subsequent passes of the first pitch area past the marking material applicator in the same manner as the marking of the first page image, and,

if additional page images are to be marked on the intermediate substrate, the beginning of marking of additional page images continues to alternate between two revolutions after the revolution in which the previous page image marking began and four revolutions after the revolution in which the previous page image marking began in the same manner as described for the first, second, and third page images, wherein the marking of consecutive page images also continues to alternate between the first pitch area and the second pitch area in the same manner as described for the first and second page images

13 A method for scheduling multipass, multipitch print operations in a print system, comprising the steps of:

a) beginning the marking of a first page image by a marking material applicator on a first pitch area of an intermediate substrate during a first revolution of the intermediate substrate; and,

b) beginning the marking of subsequent page images by the applicator on available pitch areas of the intermediate substrate during subsequent revolutions of the intermediate substrate, such marking being delayed from the marking of the prior page image so that the marking of two or more page images are not completed during the same revolution of the intermediate substrate

14 A print system for processing print jobs, comprising

an intermediate substrate for receiving marking materials, being selectively partitionable into multiple pitch areas,

a marking material applicator disposed to selectively apply marking material to the pitch areas on the intermediate substrate; and,

a controller operationally coupled to said intermediate substrate and said applicator for controlling said intermediate substrate and for scheduling the application of marking material by said applicator, wherein the controlling includes partitioning the intermediate substrate into multiple pitch areas and wherein the scheduling includes a) scheduling the marking of multiple page images by said applicator on the multiple pitch areas, the marking of each page image being accumulated and completed during multiple passes of an assigned pitch area past said applicator, b) beginning the marking of a first page image on a first pitch area during a first revolution of said intermediate substrate, and c) beginning the marking of subsequent page images on available pitch areas of the intermediate substrate during subsequent revolutions of the intermediate substrate, such marking being delayed from the marking of the prior page image so that the marking of two or more page images are not completed during the same revolution of said intermediate substrate

15 The print system set forth in claim 14, wherein said intermediate substrate is selected from the group consisting of a rotating drum and a moving belt

16. The print system set forth in claim 14, wherein said print system is an ink-jet print system and said marking material applicator is an ink-jet print head

17 The print system set forth in claim 16, wherein said print head is a piezoelectric print head using a solid ink supply to mark said intermediate substrate

18. The print system set forth in claim 16, wherein said print head marks a one quarter resolution swath of the page image in an assigned pitch area of said intermediate substrate during each of four consecutive passes of said intermediate substrate past said print head, accumulating and completing the page image in the four passes and wherein the controller moves the print head in cross-process direction after each pass to position the print head for the next pass

19. The print system set forth in claim 16, wherein said print head marks a one sixth resolution swath of the page image in an assigned pitch area of said intermediate substrate during each of six consecutive passes of said intermediate substrate past said print head, accumulating and completing the page image in the six passes and wherein the controller moves the print head in cross-process direction after each pass to position the print head for the next pass

20. The print system set forth in claim 14, wherein said print system is a xerographic print system, wherein said marking material applicator includes a developer station using a toner mixture to mark said intermediate substrate